10-213

REQUEST FOR ACCESS OF ABANDONED APPLICATION UNDER 37 CFR 1.14(

PROCESSED BY

NOV 4 - 1998

FIII

In re Application of	
Boyle et al	
Application Number	**Filed**
26,957	3-5-93
Group Art Unit	**Examiner**

Paper No. #30

Assistant Commissioner for Patents
Washington, DC 20231

I hereby request access under 37 CFR 1.14(a)(3)(iv) to the application file record of the above-identified ABANDONED application, which is: (CHECK ONE)

X (A) referred to in United States Patent Number 5654407, column _____.

___ (B) referred to in an application that is open to public inspection as set forth in 37 CFR 1.11, i.e., Application No. _____, filed _____, on page _____ of paper number _____.

___ (C) an application that claims the benefit of the filing date of an application that is open to public inspection, i.e., Application No. _____, filed _____, or

___ (D) an application in which the applicant has filed an authorization to lay open the complete application to the public.

Please direct any correspondence concerning this request to the following address:

_____

_____

_____

Nancy Perry
Signature

11/4/98
Date

Nancy Perry
Typed or printed name

FOR PTO USE ONLY

Approved by: _____ (initials)

Unit: _____

US005654407A

United States Patent [19]

Boyle et al.

[11] Patent Number: 5,654,407

[45] Date of Patent: Aug. 5, 1997

[54] HUMAN ANTI-TNF ANTIBODIES

[75] Inventors: **Petra Boyle**, Pinole; **Gayle D. Wetzel**, Martinez; **Kenneth J. Lembach**, Danville, all of Calif.

[73] Assignee: **Bayer Corporation**, Berkeley, Calif.

[21] Appl. No.: **435,246**

[22] Filed: **May 5, 1995**

Related U.S. Application Data

[63] Continuation of Ser. No. 145,060, Oct. 29, 1993, abandoned, which is a continuation-in-part of Ser. No. 26,957, Mar. 5, 1993.

[51] **Int. Cl.**[6] **C07K 16/24**

[52] **U.S. Cl.** **530/388.15**; 424/142.1; 424/145.1; 424/158.1; 435/335; 530/388.23; 530/388.24

[58] **Field of Search** 424/142.1, 145.1, 424/158.1; 435/70.21, 172.2, 335; 530/388.15, 388.23, 388.24, 389.2

[56] **References Cited**

PUBLICATIONS

Rhein, R., "Another Sepsis Drug Down—Immunex' TNF Receptor," *Biotechnology Newswatch* Oct. 4, 1993, McGraw Hill, Publishers., pp. 2–3.

Boyle et al., "A Novel Monoclonal Human IgM Autoantibody Which Binds Recombinant Human and Mouse Tumor Necrosis Factor–α," *Cell. Immunol.* 152:556–568, 1993.

Boyle et al., "The B5 Monoclonal Human Autoantibody Binds to Cell Surface TNFα on Human Lymphoid Cells and Cell Lines and Appears to Recognize a Novel Epitope," *Cell. Immunol.* 152:569–581, 1993.

Primary Examiner—Robert D. Budens

Attorney, Agent, or Firm—James A. Giblin

[57] **ABSTRACT**

Human monoclonal antibodies (mAbs) which bind to human TNFα are disclosed. Autoantibodies of both the IgM and IgG isotypes are disclosed. A preferred human monoclonal antibody is known as B5 (F78-1A10-B5 mAb) and it binds to recombinant human TNFα (rhTNFα) in ELISA format with a titer comparable to three high affinity neutralizing mouse mAbs. It also binds to cell surface TNFα and prevents TNFα secretion by human monocyte cell lines.

12 Claims, 11 Drawing Sheets